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The headings (**bold type**) are arranged in alphabetical order, sub-headings being differentiated by the use of low case type for the initial letter. Copious cross-references are provided to direct attention to relevant headings.

At the end of the Index (for convenience in reference) will be found a collected list of all the headings employe grouped into sections by subject on the same basis as the monthly issues of "Science Abstracts." The reader recommended to inspect this list before commencing a search, so that no heading relevant to his subject may overlooked.

Substances. The names of a large number of elements, compounds and substances have been introduced th year as headings; abstracts containing significant physical information are entered under these (with the exceptio noted below) as well as under the appropriate subject headings. Until one or two years' experience has been gaine there will doubtless be some deficiencies in these entries, but it is hoped that this innovation will prove useful. Sin the index is intended for the use of physicists, no special regard has been paid to exact chemical designation, and far as possible the familiar names have been used for compounds. Only the simpler of organic compounds have be listed by name. For the present, no entries under substance names have been made for the following: Alloys; me minerals; Crystal structure, molecular; Luminescence, unless of pure substances; Spectra, including Luminescen spectra and Raman spectra; Nuclear species. The names of all substances and nuclei in these categories are, howev quoted in the entries under the respective subject headings. Substance headings have not been included in t Collected List of Headings on p. 1308.

Suggestions for the extension and improvement of the Index will be welcomed.

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  - effects
  - showers and bursts
  - variations
  - alpha-particles
  - electrons
  - mesons
  - neutrons
  - protons

MAGNETISM

- Magnetism
- Ferromagnetism
  - theory
- Paramagnetism
- Diamagnetism
- Magnets
- Magnetic fields
- Magnetic field measurement

COLLECTED LIST OF SUBJECT INDEX HEADINGS

agnetization
emagnetization
yromagnetic effect
agnetic hysteresis, relaxation
agnetic measurements
agnetic properties of substances
ramagnetic resonance absorption
uclear magnetic resonance

ELECTROMAGNETISM. ELECTRODYNAMICS

ectrodynamics
ectromagnetism
ductance
dy currents
eld theory
ght
ectromagnetic wave propagation
  atmosphere
  ionosphere
  waveguides
ectromagnetic waves
  radiators
  iffraction
  eflection
  attering
  bsorption
ectromagnetic oscillations
ectra, r.f.
ectrometers, microwave
terferometers
terferometry
smic radiation, r.f.
n, radiation, r.f.
adiation, theory

MAGNETIC EFFECTS

agnetoelectric effects
all effect
agnetomechanical effects
yromagnetic effect
agnetostriction
agneto-optical effects
ouble refraction, magnetic
agnetothermal effects
agnetochemistry
eman effect
rrestrial magnetism

THEORY OF SOLID STATE

lids, theory
ystals, lattice dynamics
antum theory

MOLECULAR STRUCTURE

olecules
  dimensions
  dissociation energies
  excitation
  internal mechanics
    energy levels
    nuclear coupling
  moments
  physical structure
  relaxation
ectra
olecular beams
olecular volume
vogadros number

TOMIC STRUCTURE. ISOTOPES

oms
  excitation
  magnetic moment
  structure
nstants, atomic
omic beams
nization potential

Nucleus
  electric moment
  energy levels
  magnetic moment
  spin
  theory
Nuclear magnetic resonance
Spin-lattice coupling
Nuclear forces
  scattering
Nuclear isomer separation

Atomic mass
Atomic volume
Elements
  origin
  relative abundances
Periodic system
Isotopes
  relative abundances
Mass spectra
Isotope separation
Mass spectrometers
  accessories
  applications
Tracers

RADIOACTIVITY. α-, β-, γ-RAYS

Radioactivity
  artificial production
  decay periods
  decay schemes
  electron capture
  protection
Radioactive disintegration theory
Radioactivity measurement
Radioactive tracers
Radiation protection
Radiation monitoring

Alpha rays
  absorption
  detection, measurement
  effects
  scattering
Alpha-ray spectra
Beta rays
  absorption
  measurement
Beta-ray spectra
Beta-ray spectrometers
Gamma rays
  absorption
  angular distribution
  detection, measurement
  effects
  internal conversion
  scattering
Gamma-ray spectra
Gamma-ray spectrometers

NUCLEAR REACTIONS

Nuclear excitation
Nuclear isomer separation
Nuclear forces
  scattering
Nuclear reactions
Nuclear reactions, chemical effects
Thermonuclear reactions
Nuclear fission
  products
Nuclear fission reactors

Counters
Ionization chambers
Cloud chambers
Photography, particle tracks
Collision processes
Radiochemistry
Chemical effects of radiations

Biological effects of radiations
Radiation monitoring
Radiation protection

ATOM AND MOLECULE BEAMS. MESONS. NEUTRONS

Atomic beams
Molecular beams
Fundamental particles
Scattering
Particle accelerators
Neutrons
  absorption
  detection
  diffusion
  polarization
  production
  reflection
  scattering
    proton-neutron
Neutron diffraction
Neutron spectrometers
Neutrino

Mesons
  absorption
  decay
  mass
  production
  scattering
Field theory, meson field
Protons
  absorption
  magnetic moment
  negative
  production
  scattering
Deuterons
  scattering
Electrons
  radiation
  scattering
Electron theory

STRUCTURE OF SOLIDS

Solids
  structure
  theory
Density
Plasticity
Surface texture
Fracture
Brittleness
Vitreous state
Powders
Granular structure
Particle size
Area measurement, porous substances
Sintering
Fibres
Porosity
Permeability
Membranes
Swelling
Diffusion, solids
Films, solid
Solid solutions
Electron diffraction examination
Electron microscope examination
X-ray examination of materials

ELASTICITY. STRENGTH RHEOLOGY

Elasticity
Elastodynamics
Elastic constants
Photoelasticity
Stress-strain relations
Elastic limit
Elastic losses
Elastic deformation
Plastic deformation

- Plastic flow
- Plasticity
- Slip
- Compressibility
- Elastic fatigue
- Elastic relaxation
- Creep

- Mechanical strength
- Breaking strength
- Fracture
- Adhesion
- Abrasion
- Hardness
- Work hardening

- Cold working
- Stresses, internal

- Rheology
- High-pressure effects
- Friction

PHYSICAL CHEMISTRY

- Phase equilibrium

- Exchanges, chemical
- Reaction kinetics
- Reaction rates
- Chemical reactions
- Heat of reaction
- Explosions
- Combustion
- Catalysis
- Catalysts

- Electrochemistry
  - electrodes
- Electrolysis
  - electrodes
- Conductivity, electrolytic
- Ions, electrolytic
- Ion velocity, electrolytic
- Electrodeposition
- Dissociation
- Heat of dissociation
- *p*H

- Chemical effects of radiation
- Photochemistry

- Colloids
- Thixotropy
- Sols
- Gels
- Emulsions
- Suspensions
- Aerosols
- Foams
- Particle size
- Centrifuges
- Sedimentation, colloids

- Adsorption
- Adsorbed layers
- Heat of adsorption
- Chromatography
- Phase transformations

- Atomic weight
- Molecular weight
- Molecular weight determination
- Molecular volume
- Periodic system
- Elements
  - chemical properties
  - relative abundances

- Bonds
- Valency
- Chemical structure
  - optical, magnetic, etc., effects
- Stereochemistry
- Magnetochemistry
- Polymers
- Polymerization
- Isomerism

- Laboratory apparatus
- Distillation
- Chemical reactions
- Chemical technology
- Oxidation
- Combustion
- Explosions

- Chemical analysis
  - conductimetric
  - polarographic
  - positive rays
  - radioactive
  - X-rays
- Spectrochemical analysis

CRYSTALLOGRAPHY

- Crystallography
  - mathematical
- Crystals
  - electron states
  - etching
  - faces
  - growth
  - imperfections
  - lattice dynamics
  - orientation
  - twinning

- Crystal chemistry
- Crystal properties
  - electrical
  - magnetic
  - mechanical
  - optical
  - thermal
- Counters, crystal
- Crystallization
- Heat of crystallization
- Polymorphism

- Crystal structure
  - molecular
- X-ray crystallography
  - analytical methods
  - apparatus
  - technique
- X-ray examination of materials
- Electron diffraction crystallography
- Electron diffraction examination
- Electron microscope examination
- Mineralogy

GEOPHYSICS

- Geophysics
- Geodesy
- Gravity

- Seismology
- Seismic waves
- Seismographs
- Microseisms

- Terrestrial electricity
- Terrestrial magnetism
- Magnetic storms

- Earth
  - age
  - composition
  - heat
  - rotation
- Geophysical prospecting

- Oceanography
- Tides
- Seawater
- Rivers

ATMOSPHERE. METEOROLOGY

- Meteorological instruments
- Hygrometers
- Anemometers
- Barometers
- Weather forecasting

- Atmosphere
  - composition
  - humidity
  - movements
  - structure
  - temperature
  - thermodynamics
- Humidity
- Ionosphere
- Ionosphere measuring apparatus
- Ionization, atmosphere
- Atmospheric disturbances
- Thunderstorms
- Magnetic storms

- Sunlight
- Sky brightness

- Wind
- Clouds

- Snow
- Ice
- Rainfall
- Fog
- Condensation
- Evaporation
- Climatology
- Soil

- Atmospheric optics
- Visibility
- Night sky
- Twilight
- Atmospheric electricity
- Aurora
- Lightning
- Atmospheric acoustics

COLLECTED LIST OF SUBJECT INDEX HEADINGS

BIOLOGY

Biology
Biological technique and instruments
Electrobiology
Biological effects of radiations
Zoology
Blood

Vision
Colour vision
Hearing
Ear
Speech

MEDICAL SCIENCE
Medical science
Electrotherapy
Radiotherapy
Radiography
Hygiene
Radiation protection

PHOTOGRAPHY

Photography
  applications
  colour
  high-speed
  particle tracks
Lenses, photographic

Cameras
Photographic light sources
Photographic materials
  sensitivity
Photographic process
  development

Photogrammetry
Densitometry
Radiography
  accessories
  microradiography
Cinematography
  high-speed

MATERIALS

Water
Ice
Glass
Glass-metal seals
Optical materials

Ceramics
Fibres
Paper
Rubber
Plastics

Metallurgy
Metals
Alloys